

App. No. 10/050621
Office Action Dated July 16, 2004
Amd. Dated November 12, 2004

Listing of Claims:

1. (Original) A method of fabricating a multi-layer circuit board assembly, comprising: providing a first multi-layer circuit board module which has opposing first upper and lower surfaces, and a first lateral edge joining said first upper and lower surfaces, said first upper surface being formed with a plurality of first module interconnect circuit traces that are led toward said first lateral edge; providing a second multi-layer circuit board module which has opposing second upper and lower surfaces, and a second lateral edge joining said second upper and lower surfaces, said second upper surface being formed with a plurality of second module interconnect circuit traces that are led toward said second lateral edge; forming a plurality of first solder pads on said first lateral edge of said first multi-layer circuit board module such that each of said first solder pads is connected electrically to a respective one of said first module interconnect circuit traces; forming a plurality of second solder pads on said second lateral edge of said second multi-layer circuit board module such that each of said second solder pads is connected electrically to a respective one of said second module interconnect circuit traces; stacking said second multi-layer circuit board module on top of said first multi-layer circuit board module such that said second lower surface is superimposed on said first upper surface and such that said second solder pads are registered with said first solder pads, respectively; and bonding each of said second solder pads to the registered one of said first solder pads so as to interconnect said first and second module interconnect circuit traces.

2. (Original) The method as claimed in claim 1, wherein: each of said first solder pads includes a first bonding portion formed on said first lateral edge, and a connecting portion extending transversely from said first bonding portion to said first upper surface to connect electrically with a respective one of said first module interconnect circuit traces; and each of said second solder pads includes a second bonding portion formed on said second lateral edge, and upper and lower connecting parts extending transversely from said second bonding portion to said second upper and lower surfaces, respectively, said upper connecting parts connecting electrically with a respective one of said second

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module interconnect circuit traces, each of said lower connecting parts being in contact with said connecting portion of the registered one of said first solder pads.

3. (Original) The method as claimed in claim 2, wherein said first and second lateral edges are substantially flat, and said first and second bonding portions are planar.

4. (Original) The method as claimed in claim 2, wherein said first lateral edge is formed with a plurality of concave recesses that extend between said first upper and lower surfaces, and said second lateral edge is formed with a plurality of concave recesses that extend between said second upper and lower surfaces, each of said first and second bonding portions lining a respective one of said concave recesses.

5. (Original) The method as claimed in claim 1, wherein said first and second solder pads are bonded together by electroplating.